

## Remarks

By the foregoing amendments, Applicant has amended independent Claims 19 and 21 to include the language of allowable Claim 69, canceled independent Claim 20, corrected the dependency of Claim 71 as suggested by the Examiner, amended the dependency of Claims 70, 71 and 72, and cancelled dependent claims depending from cancelled independent Claim 20. These amendments should raise no new issues requiring further examination, and they are submitted to be appropriate for entry at this time.

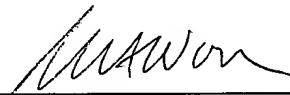
Additionally, Applicant wishes to point out that Claims 1-17 are still pending in this application. These claims appear in U.S. Patent No. 5,733,092, they are included in the copy of the '062 patent that forms the basis of the specification of this application, and they have never been cancelled. Accordingly, Applicant submits that Claims 1-17 remain in the case and are in condition for allowance. Applicant has enclosed an Appendix "Status of Claims" showing the status (pending or cancelled) as of the date of this Amendment of all patent claims and all added claims.

Claim 18 has been allowed, and the application includes only two other independent claims, Claims 19 and 21. Since both Claims 19 and 21 have been amended to include the language of allowable Claim 69, Applicant submits that Claims 19 and 21 and all of the claims that depend therefrom are now in condition for allowance.

Additionally, Applicant has enclosed a Supplemental Inventors' Declaration as required by 37 CFR §1.75(2) stating that every error corrected which is not covered by the Declaration originally submitted in this application arose without any deceptive intention on the part of the Applicant.

In making the foregoing amendments, Applicant has acted to expedite prosecution, and these amendments should not be misconstrued as an acquiescence in any of the rejections of the outstanding Office Action. Nevertheless, in view of the fact that these amendments have been made, Applicant submits that all of the pending claims are in condition for allowance.

Respectfully submitted,



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## APPENDIX

19. (Amended) In a highway crash cushion of the type comprising a diaphragm and at least one energy absorbing element disposed adjacent the diaphragm, the improvement comprising:

- a support structure comprising a single rail assembly disposed under the crash cushion and comprising a first end and a second end, the support structure being anchored to a support surface between the first and second ends,

- a guide coupled to the diaphragm;

- the guide mounted to slide along the support structure and to restrict movement of the diaphragm with respect to the support structure in at least one lateral direction;

- the diaphragm coupled to a leg assembly extending beneath the diaphragm on at least one side outboard of the support structure to support the diaphragm on the support surface.

21. (Amended) In a highway crash cushion of the type comprising a diaphragm and at least one energy absorbing element disposed adjacent the diaphragm, the improvement comprising:

- a support structure comprising a single rail assembly disposed under the crash cushion and anchored to a support surface,

- a guide coupled to the diaphragm,

- the guide mounted to slide along the support structure and to restrict movement of the diaphragm with respect to the support structure in at least one lateral direction, the guide mounted to slide along the support structure without extending below a lower surface of the support structure;

- the diaphragm coupled to a leg assembly extending beneath the diaphragm on at least one side outboard of the support structure to support the diaphragm on the support surface.

22. (Amended) The invention of Claim 19 [or 20] wherein the guide is mounted to slide along the support structure without extending below a lower surface of the support structure.

23. (Amended) The invention of Claim 19 [or 20] wherein the guide is mounted to slide along the support structure and to allow contact between a lower surface of the support structure and the support surface.

25. (Amended) The invention of Claim [20 or ]21 wherein the support structure comprises a first end and a second end and is anchored to the support surface between the first and second ends.

26. (Amended) The invention of Claim 19[, 20,] or 21 wherein the support structure is anchored to the support surface under the crash cushion.

27. (Amended) The invention of Claim 19[, 20,] or 21 wherein the support structure is anchored to the support surface under the diaphragm or the at least one energy absorbing element.

28. (Amended) The invention of Claim 19[, 20,] or 21 wherein the support structure is anchored to the support surface at a first location and wherein the diaphragm moves past the first location during collapse of the crash cushion.

36. (Amended) The invention of Claim 19[, 21, or 35] or 21 wherein the guide and the leg assembly provide resistance to overturning in the at least one lateral direction.

37. (Amended) The invention of Claim 19[, 20,] or 21 wherein the guide is mounted to restrict movement of the diaphragm with respect to the support structure in both lateral directions.

38. (Amended) The invention of Claim 19 or 21[, 21, or 35] wherein the leg assembly extends beneath the diaphragm on both sides outboard of the support structure to support the diaphragm on the support surface.

39. (Amended) The invention of Claim 19[, 20,] or 21 wherein the support structure comprises first and second flanges, and wherein the guide extends under the flanges to prevent excessive upward movement of the diaphragm with respect to the support structure.

40. (Amended) The invention of Claim 19[, 21, or 35] or 21 wherein the leg assembly extends on both sides of the support structure such that the leg assembly extends laterally outwardly of all of the guide and laterally outwardly of all of the support structure.

41. (Amended) The invention of Claim 19[, 21, or 35] or 21 wherein the leg assembly comprises two legs, each leg extending on a respective side of the support structure such that the legs extend laterally farther from a centerline aligned with the support structure than both the guide and the support structure.

42. (Amended) The invention of Claim 19[, 21, or 35] or 21 wherein the leg assembly comprises two legs arranged such that all of the support structure and the guide are disposed between the legs.

43. (Amended) The invention of Claim 19[, 20,] or 21 wherein at least a forward portion of the crash cushion is freestanding.

44. (Amended) The invention of Claim 19[, 20,] or 21 further comprising an additional diaphragm and an additional energy absorbing element disposed between the additional diaphragm and the first-mentioned diaphragm.

49. (Amended) The invention of Claim 19[, 21, or 35] or 21 further comprising an additional diaphragm and an additional energy absorbing element disposed between the additional diaphragm and the first-mentioned diaphragm, wherein the additional diaphragm is coupled to an additional leg assembly extending beneath the additional diaphragm on at least one side outboard of the support structure to support the additional diaphragm on the support surface.

50. (Amended) The invention of Claim 19[, 21, or 35] or 21 further comprising an additional diaphragm and an additional energy absorbing element disposed between the additional diaphragm and the first-mentioned diaphragm, wherein the additional diaphragm is coupled to an additional leg assembly extending beneath the additional diaphragm on both sides outboard of the support structure to support the additional diaphragm on the support surface.

51. (Amended) The invention of Claim 19[, 21, or 35] or 21 further comprising:

- an additional diaphragm;

- an additional energy absorbing element disposed between the additional diaphragm and the first-mentioned diaphragm;

- an additional leg assembly, the additional leg assembly and the first-mentioned leg assembly each comprising an upper portion mounted to a respective one of the additional diaphragm and the first-mentioned diaphragm, a lower portion, two side portions, and a centerline extending between the side portions;

- each said lower portion connected to two feet shoed to support the respective leg assembly on the support surface;

- the feet extending outwardly from the respective leg assembly, away from the centerline, such that the feet are separated from the respective centerline by a maximum distance  $D_F$ , the side portions are separated from the respective centerline by a maximum distance  $D_L$ , and the ratio  $D_F/D_L$ , is greater than 1.1.

57. (Amended) The invention of Claim 19[, 21, or 35] or 21 further comprising:

- an additional diaphragm,

- an additional energy absorbing element disposed between the additional diaphragm and the first-mentioned diaphragm,

- an additional leg assembly, the additional leg assembly and the first-mentioned leg assembly each comprising an upper portion mounted to a respective one of the additional diaphragm and the first-mentioned diaphragm, a lower portion, two side portions, and a centerline extending between the side portions,

each said lower portion connected to two feet shaped to support the respective leg assembly on the support surface,

the feet extending outwardly from the respective leg assembly, away from the centerline, such that the feet are separated from the respective centerline by a maximum distance  $D_F$ , the side portions are separated from the respective centerline by a maximum distance  $D_L$ , and the difference  $D_F - D_L$  is greater than 4 cm.

63. (Amended) The invention of Claim 19[, 20,] or 21 wherein the support structure comprises at least three axially aligned, releasably interconnected support structure segments, wherein the support structure is anchored to the support surface near a first end of the support structure, near a second end of the support structure, and intermediate the first and second ends of the support structure.

64. (Amended) The invention of Claim 19[, 20,] or 21 wherein the guide is substantially centered with respect to the diaphragm.

65. (Amended) The invention of Claim 19[, 20,] or 21 wherein the support structure is substantially centered with respect to the diaphragm.

67. (Amended) The invention of Claim 19[, 20,] or 21 further comprising an additional element, the energy absorbing element being disposed between the diaphragm and the additional element.

70. (Amended) The invention of Claim [69] 19 or 21 wherein the single rail assembly is substantially centered with respect to the diaphragm.

71. (Amended) The invention of Claim [69] 19 or 21 wherein the rail assembly comprises first and second laterally-separated elements positioned to restrict upward movement of the guide, said elements extending along an axial direction defined by the rail assembly.

72. (Amended) The invention of Claim [69] 71 wherein the guide comprises first and second guide elements positioned below the first and second rail assembly elements, respectively.

## STATUS OF CLAIMS

1. Claims 1-19 are pending.
2. Claim 20 is cancelled.
3. Claim 21-32 are pending.
4. Claims 33-35 are cancelled.
5. Claims 36-65 are pending.
6. Claim 66 is cancelled.
7. Claims 67-68 are pending.
8. Claim 69 is cancelled.
9. Claims 70-74 are pending.